From: "Crawford, Jennifer" <Crawford.Jennifer@epa.gov>
To: "Burbank, Arthur L -FS" <arthur.burbank@usda.gov>
Date: 5/26/2020 8:03:05 AM
Subject: RE: Qs from FSTM2 review

Hi Art,
Its 3 mountain and 2 pacific. Does that work for you?
Thanks,!
Jennifer

From: Burbank, Arthur L -FS <arthur.burbank@usda.gov>
Sent: Sunday, May 24, 2020 10:40 PM
To: Crawford, Jennifer <Crawford.Jennifer@epa.gov>
Subject: RE: Qs from FSTM2 review

Jennifer,
I am assuming our call on Tuesday is at 3-4 pm Pacific time...not Mountain Time...
ab

From: Crawford, Jennifer [mailto:Crawford.Jennifer@epa.gov]
Sent: Wednesday, May 20, 2020 4:02 PM
To: Burbank, Arthur L -FS <arthur.burbank@usda.gov>
Subject: RE: Qs from FSTM2 review

Thanks Art! I appreciate your quick response. I have engaged ORD for the cover expertise since I am without a technical team and its not my background. These were some questions they had. Admittedly I have been pretty swamped with my other sites, as I took over a couple from my coworker on detail starting this month.... I definitely appreciated the delayed review timeline. However based on what you stated below, we are on the same page particularly for the plans and lack of going through the FS 9 criteria.
I would love to discuss prior to comment period. Thanks! How about I set something up for next week? Then I can make sure to have reviewed FSTM2 in depth first.

In the meantime, I do have some EPA comments on the WTP letter and will send those out tonight or tomorrow.
Take care! Best,
Jennifer

From: Burbank, Arthur L -FS <arthur.burbank@usda.gov>
Sent: Wednesday, May 20, 2020 11:27 AM
To: Crawford, Jennifer <Crawford.Jennifer@epa.gov>
Subject: RE: Qs from FSTM2 review

Jennifer,
Here are quick answers to your questions. I can certainly provide a more detailed response, but it will take some time, and I wanted to get a response to you quickly. If you want a more detailed response, just say so, and I will dig one out...

1. . What plants are intended to be grown on the site? The seed mix for the site will probably mimic that which was accepted for Pole Canyon Cover. It is mostly grasses and forbes, with some sage brush and some sterile immediate response grasses. The vegetation is designed to stabilize the cover and provide evapotranspiration (to whatever effect is possible considering the climate there). Trees are not planted or really encouraged. The large root systems from trees will disturb the integrity of the cover over time. While it would be neat to have trees revegetate, and

1. some may in fact do so…the potential for that is quite a ways out and with the root breaks designed into these covers it is usually not predicted to grow trees long term. I think some trees may eventually establish… I am not sure how successful they will be. On E panel there are trees establishing, but that was not covered with anything very well designed for large vegetation. The trees there are happenstance. Was this chosen for technical reasons only or does it also support the chosen adjacent ecosystem (trees / grass)? The capillary cover is chose mainly to save money. At least that is my take on it. Simplot feels that 58% reduction in precipitation inflow is sufficient, because they don't really want to cover it at all. Their basic supposition is that the horses are out of the barn and that we will see a precipitous reduction of selenium in the system as the system flushes itself out over the years. They believe that the first Pore Volume is about done, and that the arrival of contaminant selenium into the water at Hoopes Springs was basically the result of having the mining pits open and has nothing, or little to do with the overburden piles which are mostly uncovered. They have no serious interest in Source Control, and basically were only repeating that during the meeting because I have been driving that home to them that they have to provide Source Control in addition to treating the effluent at the Springs.
   Up to about a year ago, they would not admit that they needed Source Control, and felt that any cover at all was a waste of money and time. The belief that 58% reduction in precipitation influent is sufficient is a concept that is entirely theirs and I don't believe it is in line with the ARAR's or the Remedial Action Objectives.
   As you will notice in the document, they do not propose to cover A panel to reduce infiltration, but to protect soil and sediment from impacting wildlife. This is also an idea that is their construct, and not reflective of reality.
   Panel A has a significant impact and load to the system which winds up at Hoopes Springs. Simplot does not wish to address this, because they feel it takes 25+ years to see an effect, therefore they don't want to address it. That is why you don't see it on the Target Cover Area map (Figure 2-1) or really mentioned in the document for treatment of influent precipitation. They have proposed this in this document by not even mentioning it.
   I am very much not happy with this document. They do not address the 9 CERCLA criteria, they basically just put forward what they want the outcome to be, and don't talk about or dismiss out of hand the stuff they don't want to address.
   If you want I can call, and we can go over some of my concerns prior to comment period being over.
   I feel honestly that this is a poor attempt and mostly just a sales brochure for what they want. The conference call was little more than a pep talk trying to get us to buy into their desires.
   Probably better step down off my soap box now.
   Hope all is well on your end. I will attempt to contact you to discuss this deeper, if you will provide a desired date /time.
   ab

From: Crawford, Jennifer [mailto:Crawford.Jennifer@epa.gov]
Sent: Wednesday, May 20, 2020 10:09 AM
To: Burbank, Arthur L -FS <arthur.burbank@usda.gov>
Subject: Qs from FSTM2 review

Hi Art,
A few questions (in blue below) that have come up from the FSTM2 doc and presentation preliminary review, for clarification. It would be helpful to get these answered before submitting comments.

1. The slideshow describes the design and selection process for a cover system. What plants are intended to be grown on the site? Was this chosen for technical reasons only or does it also support the chosen adjacent ecosystem (trees / grass)?
2. For the ET cover with a capillary break, two questions about the designs presented in the slideshow-
   a) if the cap break was thicker and more expensive than the unlayered cover, and if they both minimize infiltration, why chose the more complicated cover?
   b) cap breaks fail due to:
      a. Flaws in membranes,
      b. Installation problems,
      c. Infiltration of fines through membranes over time (inevitable), and
      d. Root infiltration

   Deep roots are essential for successful plants in the climate around the Smoky Mine. The weather patterns for the site area favor plants that are resilient and resistant to drought and storm. Whatever plants are successful on this cover will likely penetrate a membrane a few feet below ground. Is there a plant expert on the design team?

Thanks!
Jennifer

Jennifer Crawford
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